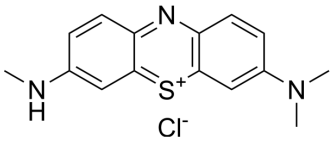
Azure B

Cat. No.:	HY-D0004
CAS No.:	531-55-5
Molecular Formula:	$C_{15}H_{16}ClN_3S$
Molecular Weight:	305.83
Target:	Monoamine Oxidase
Pathway:	Neuronal Signaling
Storage:	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 10 mg/mL (32.70 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	3.2698 mL	16.3490 mL	32.6979 mL
	5 mM	0.6540 mL	3.2698 mL	6.5396 mL
	10 mM	0.3270 mL	1.6349 mL	3.2698 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 1 mg/mL (3.27 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 1 mg/mL (3.27 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Azure B is a cationic dye and the major metabolite of Methylene blue. Azure B is used in making Azure eosin stains for blood smear staining. Azure B is a high-potency, selective and reversible inhibitor of monoamine oxidases (MAO)-A, with IC_{50}s of 11 and 968 nM for recombinant human MAO-A and MAO-B, respectively. Azure B possesses significant antidepressant-like effects[1][2].

In Vivo

Azure B (4-30 mg/kg; i.p.; once) decreases immobility in the forced swim test (FST)[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Löhr W,et al. The azure dyes: their purification and physicochemical properties. II. Purification of azure B. Stain Technol. 1975 May;50(3):149-56.

[2]. Delport A, et al. Azure B and a synthetic structural analogue of methylene blue, ethylthioninium chloride, present with antidepressant-like properties. Life Sci. 2014 Nov 11;117(2):56-66.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA